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AUTHOR Wolf, Jacke; Waldron, Mark W.
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ABSTRACT

An econometric model is suggested for managing continuing education units in Canadian universities. The value of such a model would be to unify the various factors that are often considered in fragments in traditional ways of studying the problems of such units. Many difficulties exist in using such a model to discuss educational management, but it has some virtues. First, it has the advantage of any model: it reduces a mass of information to a manageable size and shape. Second, this type of model gives the possibility of experimenting with changing variables under the control of the researcher. Third, an econometric model has the potential advantage of forcing fuller examination of important factors for managerial planning, decision making, and strategy implementation. Fourth, the model can force the manager to apply and refine decision-making criteria. Fifth, constructing and sharing a model has a powerful influence on those in authority to act in a way that minimizes negative side effects. The suggested model includes seven variables: (1) the social/public policy filters of the continuing education unit manager; (2) the commitment of the university to continuing education; (3) the commitment of the community to continuing education; (4) the organizational culture of the continuing education unit; (5) faculty resources and supports; (6) budgetary resources and supports; and (7) technological resources and supports. It is proposed that such a way of looking at the management of continuing education may result in fresh approaches and more unified efforts to solve the problems facing continuing education. (KC)

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Prof. Jacke Wolf, Head
Management Studies Section,
Continuing Education Division,
The University of Manitoba

-and-

Dr. Mark W. Waldron, Director/Prof.
University School of Part-Time
Studies and Continuing Education,
University of Guelph

MEASURING AND MANAGING VARIABLES FOR CONTINUING EDUCATION PROGRAMS IN A UNIVERSITY SETTING: AN ECONOMETRIC MODEL

Introduction

University Continuing Education Units within Canadian universities have been under severe resource pressures from inside and outside their institutions during the past few years. Access to key faculty, changes in budgetary targets, movements in the marketplace and the place of the unit within the University are among the key issues that continue to plague Continuing Education Unit managers. Perhaps because of the present state of our own professional development and self-image as adult educators, and perhaps because of the strategies adopted by other university/community stakeholders, these issues have usually been seen and treated as isolated fragments.

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Take, for example, the issue of self-image: Are Continuing Education professionals academics and, if so, why don't we get the respect due us within the University community? This single issue has consumed countless hours at staff meetings and conferences (both in the sessions and, later, in the bar. . .). The discussion calls to mind one of T. S. Eliot's creatures in Old Possum's Book of Practical Cats:

> When you notice a cat in profound meditation,
> The reason, I tell you, is always the same:
> When His mind is engaged in rapt contemplation,
> Of the thought, of the thought, of the thought, of his name:
> His ineffable effable
> Effanineffable
> Deep and inscrutable singular Name.

Yet this self-image issue, so often considered singly, is systemically interconnected with others. The plaintive cry of lack of academic respect is not answered by the determination of which union card we will carry. At any institution, academic respect is a function not only of organizational structure and personnel classification systems, but of the institution's view of the relationship of education to the community, its organizational cultural values and reward systems, its budgetary resources and program delivery capabilities -- at least.

So it is with other problems faced by the Continuing Education Unit manager. We will argue that a number of key philosophical issues are intertwined with

these operational problems, and that we do ourselves a professional and managerial disservice if the wholistic approach to their management is ignored. Each variable (issue) is linked to others, which can be identified with careful analysis. When one variable shifts, so do the others in the total management equation — the issues are interdependent.

In this search for the patterns of interconnectedness within our University Continuing Education world, we can learn a great deal from the study of quantum mechanics: an individual incident or event may be random and only statistically probable, but the behaviour of the overall management system of an individual Continuing Education Unit (i.e., collections of events) can be described with some accuracy. As Wildavsky (1979) notes, "In a world governed by partially known causal chains, where motives are sometimes effective and intentions are occasionally realized, instrumental knowledge is possible."

Two further principles from the new physics apply to our ensuing discussion of management within this field. First, when we talk about management, we are talking about ideas, and attitudes about ideas - not absolute truth. So what is important about our discussion of interconnectedness of issues is not how closely it corresponds to the absolute truth (a metaphysical issue), but how consistent it is with our own experience of how organizations (especially academic organizations) work (Zukav, 1979).

Second, we cannot observe something without changing it. We will suggest that an econometric model is one appropriate way to view the broad strategic management task within Continuing Education. An econometric model is an equation that is a hypothetical construction of reality which includes variables identified as important, and as affecting the way in which a country's or an industry's, or an organization's economy works. Just by the act of priorization and selection of variables for their perceived importance for inclusion, we have altered the reality of the equation. A cautionary note about the process which will ensue: many such models don't work because they are badly constructed. A valid model means it is acceptable; models are never perfect. If testing shows that there exists, in some meaningful sense, a close correspondence between the model and the real-life behaviour it pretends to represent, it is acceptable and valid.

While we will argue that a quantitative representation of the Unit management process is feasible and worth pursuing, this paper will not present a specific mathematical formulation. Rather, it will describe the model-building process, identify a set of universally relevant Continuing Education management variables, and suggest specific methodologies for measuring those variables quantitatively. Actual formula refinement awaits a future research task — one which we hope will be informed by discussion, comments and critiques of this paper.

Why an Econometric Approach?

Why use an econometric model and quantum mechanics to talk about University Continuing Education Unit management? Doesn't it just complicate the issue (as well as descend into trendiness) to view all our problems wholistically? Its tough enough to get a handle on things when we examine them in smaller pieces. Our best, and admittedly simplistic response is to acknowledge the difficulty in building and manipulating an econometric model, but to note that our current fragmented way of approaching these issues has not served us well.

Some background information on this type of model-building may be helpful at this point. Any econometric model is likely to include two kinds of variables. Endogenous (from the Greek, "generated from inside") variables are interconnected in the sense that a change in any one of these causes change in the others and, hence, further changes in itself. They are determined simultaneously, since to determine first one and then other would be hopeless, as they all determine one another. Take, for example, the variable of consumer demand and income. The more consumers demand goods and services, the more producers produce and the bigger the level of income becomes. But the bigger the income level, the bigger the consumer demand.

Exogenous ("generated from outside") variables are unaffected by changes in other variables. For example, in a macro-econometric model, an exogenous variable might be a government decision to change a tax rate or reduce its level

of spending. It changes the overall outcome of the equation to increase or decrease the tax rate, but the variable itself is not tied in an organic way to other variables in such a model of the larger economy.

In working with an econometric model, one assumes a hypothetical change in one of the variables and then works out (on paper via the model) the implications of that change for the character of the management setting (i.e., the total organizational economy) of this individual University Continuing Education Unit. Thus, this kind of model is built on the importance of observation and analysis by the Unit manager. Depending on the way in which observation and analysis are undertaken by that manager, the outcome will change. If we identify seven key variables rather than nine; if we weight "a" more heavily than "g" and expend more managerial effort on the former than the latter; if we choose to measure "c" in narrow rather than broad terms, the result will differ from alternative outcomes. These are all managerial judgement calls. As Wildavsky (1979) put the matter (in another context): What is peripheral and what is central? What is impossible to measure and what is merely difficult?

In whatever manner the manager observes, analyses (and, eventually, acts), s/he cannot stand safely behind the thick glass wall and watch what goes on without taking part (Wheeler, 1979). Since we cannot observe something without changing it, the possibility is that our reality is what we choose to make it (Zukav, 1979).

There are, of course, plenty of practical problems with econometric models. The most common problems occur at the formulative stage. Relevant variables may be omitted, or irrelevant ones may be included, or a variable may be given inappropriate weighting. The best, if not the least painful, preventative measure for this set of difficulties is group process. As a manager attempts to determine which are the critical variables in the organizational economy at his/her own institution, it is useful to check the list and the weighting with key peers and opinion leaders within the organization.

A second potential problem area is that the data used to measure each variable may be outdated or statistically and substantively skewed. Again, the best remedy is to check out the data sources with other informed persons. What are the relevant timeframes to consider? If we are gathering data, what are the appropriate questions to ask, and from whom?

A final, and more intransigent difficulty, is that there is no easy way to predict the value of exogenous variables. An excellent contemporary example of an exogenous variable for University Continuing Education is the proposed federal government cutback in EPF transfer payments to the provinces in support of post-secondary education. We know that major EPF cuts will have corresponding major impacts on universities. But those impacts are likely to vary depending upon the timeframe for the cutback, the ameliorative measures taken by the universities, and the retrenchment mangement strategies developed by individual

institutions. Thus, the impact of a seemingly straightforward, and nationally universal, exogenous variable becomes more difficult to measure within localized institutional parameters.

Having acknowledged these practical difficulties (and assuming an inherent, principled resistance among academic managers to the use of a quantitative management tool), let us move cautiously toward exploration of the benefits of the approach. First, it has the advantages of any model: It purposefully reduces a mass of information to a manageable size and shape, presenting a simplified representation of some aspect of the real world. If it is a good model, it describes the essential features of a complex situation, and enables us to consider more variables than we can normally carry comfortably in our heads on a day-to-day basis.

Second, this type of model gives us the possibility of experimenting with changing variables within our control, so that we can postulate the implications before we tinker with the system directly. It also allows us to speculate about the impact of changes in variables which are not under our control, and to consider proactive strategies or palliative actions in a variety of circumstances, increasing managerial flexibility in a rapidly changing environment.

Third, like other quantitative models (such as network analysis and decision trees), an econometric model has the potential advantage of forcing fuller examination of important factors for managerial planning, decision-making and strategy implementation. Constructing a model (if the task is broadly shared)

facilitates communication within the organization and can lessen resistance to subsequent change because access to both data and processes is equalized.

Fourth, when the model attempts to represent complex interdependent variables, it will force the manager to apply and refine strong decision-making criteria, often leading to more appropriate formulation of the problem. Often the difference between a good manager and a bad one (in the University, as elsewhere) lies in his/her ability to find a problem about which something can and ought to be done. If there is not a solution, likely the problem should be reformulated; the solution is part of defining the problem. Successful inventors are those that choose to develop products which will be sought in the marketplace; the prizes in science go to those who choose problems that turn out to be interesting and solvable (Wildavsky, 1979).

Finally, constructing and sharing a model has a powerful effect against entropy. Where there are viable alternatives for action, shared knowledge and agreement upon the model's assumptions has a powerful influence upon those with authority to act to do so in a way which minimizes unintended negative side-effects.

A First-Stage Example Of The Art And Craft

If there is virtue in the process, then where to begin? Let us tell you how both of us began down this road. . . . For some time, each of us has — at our own managerial level within our Continuing Education organizations (middle and senior, respectively) — been disturbed by the seeming intransigience and

unresolvability of the systemic issues mentioned in the opening paragraphs of this article. When action was taken on a single problem, often the problem-solving gave way to problem succession. Any significant action had an unexpected, and often unintended, impact on another one of these supposedly independent problems. Managing these issues, in total, was a bit like attempting to control crabgrass without dealing with the root system - it always pops up again in another place.

In short, it was the experience of our own management travails that led us toward conceptualizing an econometric model of the system. Our respective views of the important dependent variables developed in isolation from one another, but were amazingly similar, although the University of Manitoba and the University of Guelph are quite different institutions. The seven-variable model described below is a very broad one which could cover both of our institutions, and likely many others in the Canadian context. The institutional individuality would come at a later stage of model development, since the data and sub-formulae for each variable would differ (just as a variety of sub-formulae modify such broad macro-econometric models as CANDIDE). The determination of the seven variables was, in part, based on individual reflection and experience; in part, on individual environment-scanning; and in part, on informal conversations with colleagues and peers. The variables include:

- the social/public policy filters of the Continuing Education Unit manager;
- the commitment of the University to Continuing Education;
- the commitment of the community to Continuing Education;
- the organizational culture of the Continuing Education Unit;

- faculty resources and supports;
- budgetary resources and supports; and
- technological resources and supports.

Such broadly-described variables cry out for more definition and discussion of managerial approach.

The Social/Public Policy Filter of the Unit Manager

Hodgkinson (1983) points out that discussions of contemporary management often neglect the philosophy of administrative leadership, although much attention now is being paid to the importance of value components in the managerial philosophical framework (see Kanter, 1983; Schein, 1985; and Kilmann, 1986).

A basic component of any management model is that of philosophy; in this case, the specific philosophy of adult and continuing education. Without a philosophical base, a Unit manager would have difficulty responding to the questions of management referred to in this paper. One must, of course, be careful not to fall into any one philosophical camp without a recognition of other philosophies. An awareness of the existing philosophical camps, however, helps one decide the responses to management questions and even helps one pose questions.

One can talk about the philosophical orientation of the Unit manager from a variety of perspectives. One such framework would view the manager in terms

of his/her political philosophy. The importance of this variable lies in the implications of the manager's philosophy of Continuing Education inasmuch as it relates to the social/public policy development process.

For example, the Unit manager with a conservative/residual political philosophy (reborn these days as a neo-conservative or neo-corporatist) likely would view Continuing Education's role as appropriately marginal to the University with regard to baseline funding. In the words of Streeck, Schmitter and Martinelli (1980), "The corporatist hypothesis proceeds from the assumption that social integration and economic exchange in advanced industrial societies are not 'naturally' accomplished and maintained through the aggregation of the independent decisions of individual actions in the market but rather have to be produced by political arrangements at the societal level (i.e., through a balancing of power among business, labour and government)." Therefore, public subsidies should be utilized only for those who are residual to the market system: the widows-and-orphans-only view of social welfare. On an as-expedient basis, conservative/residual adherents also see it as legitimate to use public funds to underwrite activities which mutually benefit, by political arrangement, that triumvirate of business and labour and government.

Thus, the conservative/residual Unit manager is not likely to pursue an internal agenda with the University to increase its operational commitment to Continuing Education, and is likely to contentedly focus program activity on those Continuing Education events which will fully recover costs. This manager also will welcome grant-funded programs which walk in the door, but s/he will not

be inclined to seek them out or to engage in lobbying/advocacy activity to alter grant-funding parameters. In short, this manager will opt out of the social/public policy process both within and outside the University.

Parallel Unit scenarios could be developed for other political philosophies. Another useful — and more familiar — framework for assessing the social/public policy filter of the Unit manager is the six educational philosophical foundations described by Elias and Merriam (1980). Liberal philosophies place an emphasis on liberal education; a review of organized knowledge leading to the development of the intellectual powers of the mind. Courses in "Great Books", "Five Significant Philosophers", and "Italian Renaissance Art" would be representative of the liberal education philosophy in practice. A "liberal" manager would emphasize broad-based, intellectually challenging components in any adult/continuing education program, with less emphasis on immediate cost recovery and program objectives linked more to personal, individual development, rather than to organizational/systems change issues.

The progressive philosophical foundation focuses on education for change, applied educational situations and experiential education. An adult educator in this camp would be interested in management issues that lead to change and development, things that are practical and applied, as one finds in agricultural extension programs. The focus would be both individual and organizational development, and active grant-seeking would be consistent with this philosophy.

The behaviourist is interested in modern scientific movements, in behaviour modification, in management by objectives and competency-based adult education. Such a manager places emphasis on objectives, critical paths, reward systems and management control. An organizational, rather than individual, focus is likely to dominate program planning and funding.

The humanistic philosophical foundation relates to existentialism and a feeling for trust, autonomy and self-directedness. Such a manager places less emphasis on the job to be done and more on the humanizing nature of the environment in which freedom and trust will lead to "ownership" of the task. This, again, has a more individual development focus. Seeking grant funding would be less attractive for this manager because of the potential for conflict with funder objectives.

The radical foundation is used by managers who see adult education as a means of achieving radical social change and is closely connected with social, political and economic concerns. The manager of this purist philosophical persuasion is a rare breed in University Continuing Education Units, for obvious economic and organizational reasons.

The analytic philosophical foundation is based on logical positivism with an emphasis on clarification of concepts, arguments and policy statements. This questioning and analyzing ranges all the way from asking "What is an adult?" to "Is continuing education a discipline, a profession or a field of study?" Combined with other philosophical foundations, this one can be of great strength to the manager in the clarification of purposes and priorities for the Unit; standing alone, it leads to a form of managerial analysis-paralysis.

Using these philosophical foundations as filters or screens, one can then approach management issues knowing one's primary philosophical basis for asking questions and seeking solutions.

For purposes of the proposed econometric model, how can these philosophical filters be measured and managed? First, self-assessment by the Unit manager and his/her peers is indicated. Is the manager's philosophy self-evident? How is it expressed in terms of priorities for investment of management time?

- What proportion of time does the Unit manager (and his/her middle-management designates) spend on University-wide activities - Dean's Council, pan-faculty administrative committees or task forces, informal lobbying or advocacy for the unit with other faculties or central administration? This time can be converted to a cash value, as it represents an asset which can be increased or decreased if intentionally used in this type of activity.

- What proportion of time does the Unit manager (and his/her middle-management designates) spend soliciting grant-funds in support of programs, or advocating on behalf of community groups which cannot pay full cost of Continuing Education programs targeted to them? Again, there is a cash value for this kind of time use.

- What proportion of Unit programmer and support staff time is spent on programs which are directly or indirectly subsidized by baseline or grant funds? Again, a cash value can be calculated.

Answering these three questions represents a very solid attempt to measure, as a variable, the impact of the social/public policy filter of the Unit manager.

The Commitment of the University to Continuing Education

How important is Continuing Education to the University? Is it central or marginal to the core activities of the institution? Other writers have dealt with marginality at length — among them, Moses (1971), Kolker (1975), Penfield (1975), Darkenwald (1977) and Beder (1979). Most, like Devlin (1986), addressed the question of marginality by examining funding and budgets. We would not underestimate the power of money as a management resource; indeed, we treat it as a separate variable below. However, in these times of University-wide restraint, we suggest that the absolute value or ratio of baseline dollars to Continuing Education is not the only important measure of University commitment. Some other suggested measures:

- Is Continuing Education mentioned in the mission statement of the University and, if so, in what context?
- Is Continuing Education mentioned in the academic plan of the institution?
- What are the important day-to-day operational decision-making bodies and committees in the institution - formal and informal? On which ones does the Continuing Education Dean/Director sit?
- What is the informal ease of access for the Dean/Director to the President, the Academic or Administrative Vice-President(s), the Chair of the Board of Governors? How frequently do they see one another outside of formal, annual processes?
- Do Presidents, Vice-Presidents, and other senior administrators make attendance at Continuing Education ceremonial events a high priority (e.g., graduations, high-profile seminars and conferences, etc.,)?
- How is formal policy-setting for Continuing Education conducted? Is it left to the Unit, or are other University units involved through a board or committee structure?
- Does more than one unit do Continuing Education in the institution? If so, does anyone care about coordinating those activities and preventing turf conflict?

The direction of our suggested measures is transparent. Money is not the only determinant of organizational power, particularly in hard times. For, if Continuing Education is not stated as a University-wide mission or included in institutional planning, and if the Dean/Director has little formal or informal access to power, there simply is not any base for fighting budgetary battles. Where these conditions do not exist, we submit that they can be built, slowly and carefully, over time by a committed Continuing Education manager.

The Community's Commitment to Continuing Education

One of the advantages of being a boundary-spanning Unit of the academic monolith is the ability to access power outside the institution as well as within it. The successful Continuing Education Unit must keep a foot in both camps, but Continuing Education can more easily tap into community, political and social power bases than, say, can the Department of Philosophy or Semiotics. Here are some suggestions for examining the level of community commitment to a Unit's activities:

- Does the Unit offer a wide range of programs, appealing to a variety of community interests — credit-degree completion opportunities, professional Continuing Education, personal development, programs targeted to specific groups which may experience post-secondary educational barriers (e.g., natives, women), programs targeted to meet employer training needs?

- Are programs well-subscribed? Are applicants turned away for lack of space in some offerings? Do you have more community requests for program development than you can service?

- Are programs advised by community-based committees? Are these committees consciously constructed to provide a power base, as well as an educational referent? Egalitarian resistance to inclusion of the social, professional and political elite can be costly in the long-term.

- Is it easy to get media public service time to market your programs? Do the media seek out the Unit reasonably regularly in search of feature stories because interesting things happen there? Do local columnists see Unit activities as a source of patter?

- Does the Dean/Director know the key people in the province's post-secondary office personally? Does s/he feel comfortable to call them for informal input or advice?

- Does the Unit receive unsolicited testimonial letters or comments from students or professional groups? If so, who does it share them with - University senior management, advisory committees, the general public through marketing efforts, etc.?

The Organizational Culture of the Continuing Education Unit

The culture of an organization is a collection of norms and values, mostly unwritten, which govern the behaviour of the people within it. A wide variety of management scholars have devoted attention to the importance of this variable in determining organizational success, including Schein (1985) and Kilmann (1984, 1986). Blaney (1986) has directed the discussion of organizational culture to the University Continuing Education Unit, in particular, by highlighting the need to be in harmony with the wider University culture while developing a distinctive Unit sub-culture appropriate to adult education.

In attempting to analyze a Unit's culture, Schein (1984), suggests such a culture will say something about the nature of the following important values:

- Relationships — Are relationships within the organization primarily hierarchical, or egalitarian in nature?

- Time — Is the Unit oriented to the past, the present, or the future in its activities?

•Environment — Does the dominant value reinforce a belief that we have control and input into our environment, or that we are victims of the events that occur around us?

•Truth — Is only "one truth" allowable, or is the discussion and validation of "many truths" encouraged?

•Human Nature — Does the organization essentially believe that human beings are good, and to be encouraged in their goodness and creativity, or evil, and to be governed in a way which will limit the amount of evil they can do?

•Activity Orientation — Is the organization one that places the accent on "doing" or "being"?

Some useful questions to fill in this framework for viewing culture include:

•How layered is the organizational structure of the Unit? Is the norm to "go through channels" or to value matrix-style access at all levels of the Unit?

•Does any sense of peer equality apply only to programmers or academic staff, or does it include clerical/support staff? If so, to what extent?

•How approachable/supportive is the Dean/Director? What kinds of issues provide the exception to whatever is the existing rule?

•Is the Unit proactive or reactive in its programming? Does it wait until a request comes in the door, or does it seek out key groups to work with or "leading edge" issues to tackle?

•Can the Unit create and offer interdisciplinary programs when these are sought by the community?

•Do senior management and staff focus their complaints on actors outside the Unit (e.g.,"if only central administration/the faculties would. . .), or are most problems seen to be within Unit power to impact or resolve?

•Does the Unit lean on past glories in its anecdotes and in its programs? How often are programs reviewed, evaluated, retired?

•What future planning horizons are used — one year, five years, next week? Are such horizons institutionally imposed by central administration, or do they have operational meaning for the Unit?

- How are program or budgetary failures treated? Are they viewed as creative learning experiences or disciplinary examples? Or are they just ignored, with no perceived organizational consequences, positive or negative?

- Is programming activity rigidly controlled by parameters, caveats and procedures of a bureaucratic nature? What are the risks these procedures seek to limit?

- Do programmers see themselves as brokers or creators? As academic staff with teaching and research skills, or as ancillary staff providing service supports?

- How does program change occur — on the basis of market research, hunches, or limited advice from staff and management cronies?

- How is conflict handled within the Unit, personal or programmatic? Is it viewed as "bad" — a violation of the one-big-happy-family norm — or has it managed to provide validation for a variety of opinions while achieving workable compromise?

- How are daily rituals handled? Is the manager a clock-watcher or relaxed, but with high performance expectations? Do staff socialize comfortably with one another? How are promotions, dismissals and discipline handled? How is achievement recognized?

Many, but not all, management scholars cite the role of the Unit leader as most critical in changing cultural variables which impede organizational success. Others, including Short and Ferratt (1984), argue that those below senior management levels can initiate and solidify cultural changes. Again, a prescriptive bias underlies our suggestions for measurement. As with other enterprises, we feel Continuing Education is better served by a proactive, participative, research-grounded culture which values and publicly rewards the creative talents of all of its staff.

For purposes of the model, we would suggest that this variable can be measured by establishing a weighted, graduated scale appropriate for the Unit for responding to the 14 questions outlined above. Changes in any of the items listed would then be registered by movement toward or away from a maximum score. With practice and keen observation, the Unit manager should, over time, be able to distinguish significant intervals or ranges of movement in the total scale which will impact on other variables.

Faculty Resources and Supports

Continuing Education managers, we feel confident, would argue that access to skilled faculty resources is an essential variable in program and Unit management. In this area, more than in many others, however, Units often seem caught in the web of tradition and procedural practice. Difficulties in accessing good faculty seem to fall into three categories:

(1) The institution just doesn't have the horses to run the race. Faculty in a needed program area do not exist on staff, or they are weak in content area, or they can't function in a classroom of over-25-year-olds.

(2) The faculty members don't perceive any long-run career payoff in teaching for Continuing Education. Such activities don't count in promotion and tenure decisions, or they don't count as much as undergraduate and graduate teaching and research.

(3) Faculty members don't perceive enough short-term payoff in Continuing Education paycheques. The institution may set limits on remuneration for University staff teaching Continuing Education offerings, or Revenue Canada guidelines for extraordinary payments to full-time staff may make the opportunity cost for spending evenings in Continuing Education classrooms too high.

The above categories of barriers concern instructional faculty contracted from outside the Unit. There are further difficulties in obtaining good academic staff within the Unit, as well:

(1) Do Continuing Education academic staff have compensation, promotion and tenure opportunities equivalent to faculty in other units?

(2) What academic background is appropriate for Continuing Education staff? Content specialization with adult education interest and expertise, or adult education specialization flexible across programs? Who decides and based on what criteria (and do the criteria last longer than the lifespan of a Dean/Director)?

There are standard organizational responses to the difficulties outlined regarding instructional faculty from outside the Unit. Where institutional resources are non-existent or weak, the Unit can locate and develop community instructors or, if the finances allow, faculty from other institutions can be imported. Or it can decide not to offer the program. Where there is no long-run career payoff for Continuing Education participation, senior Unit managers can undertake careful committee work and advocacy within the institution to change the rules of the game. Where arbitrary, rather than market, limits are placed on remuneration rates for full-time University staff, other "perks" can be provided to make Continuing Education activity more attractive (e.g., course development contracts, program-related professional development and travel, etc.).

For Unit academic staff, again careful committee work and advocacy may be required to make staff positions attractive and career-directed. The problem of educational criteria for success in the Unit can be resolved through development of stable, written hiring and promotion policies which articulate educational requirements.

In terms of the econometric model under discussion, a useful measure of this variable might include, as in the variable above, development of a weighted, graduated scale for response to questions like the following:

- Does Continuing Education teaching count toward promotion and tenure decisions for faculty in other units?
- If not, does the Dean/Director participate actively in decision-making structures which have the power to change promotion and tenure criteria?
- Does the Unit provide teaching support services for instructors, including opportunities for training in adult education philosophies, methods, curriculum design, etc.?
- Are sufficient classroom aides and marking supports provided to ensure good instruction and high-quality evaluation?
- Do classroom and program evaluations have instructor input and are they used with instructors to improve teaching quality and impact?
- Are Continuing Education teaching activities internally showcased through teaching awards, letters of commendation to Deans and Department Heads, recognition in newsletters, etc.?
- Are Continuing Education remuneration rates for full-time University faculty set by market considerations or limited by the institution?
- If rates are arbitrarily limited, does the Dean/Director participate actively in decision-making structures which can change these constraints?
- Do Continuing Education academic staff have compensation, promotion and tenure opportunities equivalent to those in other units?
- If not, does the Dean/Director participate actively in decision-making structures which can change this?

- Does the Unit have clear, written hiring and promotion criteria which priorize and articulate educational requirements?
- If not, is there a council or committee structure within the Unit which can be charged with developing a draft response to this task?

Budgetary Resources and Supports

As mentioned above, this variable has received some attention in the literature, as in Devlin's (1986) study with respect to marginality. Because it has been dealt with in greater depth by others, and because of its universally recognized importance to Unit and program operation, this discussion will be confined to highlighting current budgetary dilemmas and suggesting methods of measurement of the variable for the management purposes of the model.

At the risk of oversimplification, the following points attempt to summarize the situation currently facing most Continuing Education Units:

(1) Universities, as a whole, are in trouble. Prolonged government cutbacks have had an impact on capital plants and on instructional and research range and quality. Most Canadian Universities do not have a strong tradition of private fund-raising, as do many of their U.S. counterparts, and tuition costs remain a small percentage of institutional income.

(2) Cutbacks are likely to increase, rather than decrease, for Universities in most provinces as federal EPF transfers are reduced, and as provincial governments wrestle with debt reduction and increased service demands on a broad front.

(3) Within Universities, Continuing Education is a poor cousin. Most are perceived as service or donor Units, not performing core functions of the institution. Many institutions do not have Continuing Education as part of their mission statement. Most, if not all, have internal decision-making structures which weight power disproportionately toward the traditional faculties. Continuing Education does not receive high budgetary priority.

(4) Within its global poor-cousin status, certificate credit, continuing professional education and general interest offerings have even less value to the institution than degree-credit extension. Units are under considerable pressure either to discontinue such offerings or to price them at full cost recovery levels which may make them unmarketable, given locked-in staff and capital recovery charges. As well, these pressures force confrontation on basic educational values, and many Unit managers do not have a strong

institutional powerbase from which to fight such battles. It should be noted in passing that the priorization of degree over non-degree programs is, in some Units, not a wholly external confrontation. In many cases, Continuing Education academics have consciously or sub-consciously, for personal or professional reasons, chosen the values of the institution rather than the values of their own professional field.

In response to these dilemmas, Continuing Education Units have some options for action, none of which are mutually exclusive, and all of which interact with other variables in this proposed model:

(1) Units can campaign within the institution for higher budgetary priority through active senior management advocacy on budget committees, Deans' councils, the Senate, and through direct lobbying of senior administrators and board members.

(2) In a reasonably discreet manner, the Dean/Director can conduct lobbying and advocacy activities on the Unit's behalf with provincial officials who have post-secondary program or funding responsibilities.

(3) The Unit indirectly can lobby key business and professional leaders in the community to support increased baseline funding by clearly and articulately presenting the Unit's case and by concurrently fulfilling critical community program needs in a timely and professionally sensitive way.

(4) Units can seek more external funding through program grants, training contracts, tuition increases, added fee-for-service activities, etc. This involves some investment risk of scarce Unit resources, but may have long-term paybacks if the Unit is clear about its program priorities and resource capacities before undertaking such developmental activities.

If this, in general, is the budgetary case, how best to measure movement in the variable? A sub-formula may be a useful approach, much like that attempted in the first three variables in the model:

- What proportion of the Unit's annual income is baseline money?
- What proportion of the Unit's annual income is renewable program grants?

- What proportion of the Unit's annual income is from one-time grant or tuition fees?
- What has been the annual percentage increase or decrease in baseline dollars during each of the past five years? Is there a trend present in those figures?
- If the institution has an academic or long-range plan, what priorization does Continuing Education have within it (e.g., with regard to space allocation, allocation of additional monies, distribution of potential cutbacks, access to special grants for academic development, etc.)?
- Does the Dean/Director sit on the University's budget advisory committee or some equivalent, high-level, budgetary decision-making structure?
- What degree of control does the Unit exercise over its own budget? Does the institution budget globally or are faculty budgets defended on a line-by-line basis?
- Has the Unit increased or decreased program activity during the past five years? Have the increases or decreases taken place in degree or non-degree programs?
- Has the Unit developed its own mission statement and goals with respect to degree versus non-degree activity?
- If so, are Unit activities and resource allocations consonant with these value statements?
- Does the Unit have fund-raising resources of its own (e.g., staff time dedicated to intentional search and proposal writing)?
- What are the institutional penalties for failing to meet an income target or exceeding expenditure estimates? Against whom are those penalties directed - the Unit as a whole, or specific personnel?

Technical Resources and Supports

The technological resources and supports available to a Unit are of three varieties: educational, administrative and research. The first category includes the more routine technologies of audio-visual and graphic supports to programs, and the sexier technologies which support distance education. The second category includes computerized office technologies which enhance performance

of clerical, accounting and other management tasks. The third category supports faculty research activity.

Access to audio-visual and graphic supports for programs would be recognized as a universal or "baseline" need by most Units. Whether distance education technologies are critical to the Unit will depend on its mandate and mission, the nature of its clientele, and its catchment area. All Units can benefit from appropriate use of office technologies, and nearly all could benefit from more research supports.

For purposes of the model, a useful measure of this variable might include, as with others above, development of a weighted, graduated scale for response to questions like the following:

- To what extent does the Unit have access to the distance education technologies it requires to achieve its program delivery and accessibility objectives?
- To what extent does the Unit utilize office technologies to automate routine clerical and accounting tasks in order to provide efficient and effective service to its clients?
- Does the Unit have an accessible, automated database on its clients and their characteristics which is used for needs assessment and program evaluation, as well as for marketing, purposes?
- Does the Unit's accounting system provide timely, accurate and well-aggregated information which assists management decision-making? Is that information, in fact, used to inform decision-making?
- Do Unit faculty have access to adequate library and other databases for conducting meaningful and credible research?

Conclusions

The rather elaborate exercise undertaken in this paper has two very simplistic purposes:

(1) to build the case that key variables affecting the management of University Continuing Education Units are interdependent, and to address each in isolation without contemplation of the effects of movement on other variables, at best, distorts reality and, at worst, is counter-productive for Unit managers; and

(2) to demonstrate that such key interdependent variables can be identified and, moreover, measured.

With regard to the first purpose, the above discussion begins to depict the interdependency of the variables identified in this case. For example, faculty resources, budgetary resources and University commitment clearly have an endogenous relationship. Increased University commitment (as in the measures indicated) is likely to result in organizational rewards, including appropriate recognition for participating faculty and higher priority for Continuing Education in the allocation of baseline funds. Increased organizational recognition of faculty participation is likely to increase University commitment and, in the long-run, budgetary resources. Increased budgetary resources are likely to make Continuing Education participation more attractive for faculty and, in the long-run, to foster an institutional value for what has been financially supported. A significant decrease in any of these three variables is likely to have a similar ripple effect on the other two.

Similarly, there is an endogenous relationship between community commitment and budgetary resources. Increased community commitment can result in more access to external funding, including renewable grants. If the community expresses its valuation of Continuing Education activities powerfully, the endogenous triangle would extend to University commitment. Senior administrators are no longer as insensitive to public opinion of their institutions as they were in headier financial days. Already there has been some experience in Western Canada of what happens when the University treads too heavily on Continuing Education toes and the community speaks back. The Saskatchewan experience has many positive lessons for other Unit managers.

In addition, there may be a less powerful endogenous relationship between budgetary resources and technological resources and supports.

Many of the other variables appear to us to be exogenous. They have a powerful impact on the total equation, but do not result in simultaneous change in another variable. For example, changes in the organizational culture of the Unit do not have a simultaneous impact on faculty or budgetary resources, but a Unit which believes itself to be more master than victim of its own fate is bound to fare better in the long-run, and has increased its chances for achieving positive change in other endogenously-related variables. Likewise the social/public policy filter of the Unit manager will have a long-term impact on budgetary resources and community commitment, as well as on faculty resources (particularly within the Unit), but there is no simultaneous movement.

The individual nature of the appropriate model for each institution and Unit must again be stressed. Our attempts to suggest methods of variable measurement reflect our own biases and experiences. They are surely flawed, as well as skewed, but they represent a beginning for what we believe is an important task. To survive the current and anticipated challenges facing Continuing Education Unit managers in the next decade, we must move beyond fighting fires on individual issues. It is imperative to see the relationships between issues and to identify points of action and strategy for movement. It is hoped that this attempt to conceptualize the management task differently will stimulate discussion and management experimentation, resulting in new and constructive directions for the field of the University Continuing Education.

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